Guanxi and Organizational Performance: A Meta-Analysis

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ABSTRACT Guanxi, a social network tie drawing on connections in business relations, has been identified as a powerful strategic tool helping organizations maintain competitive advantages and achieve superior performance. However, prior empirical studies on the guanxi–performance link provide indefinite conclusions. The purpose of this study is to systematically review and quantify the guanxi–performance link in a meta-analytic framework by decomposing guanxi into business ties (i.e., guanxi with business partners) and government ties (i.e., guanxi with government authorities) and organizational performance into economic performance and operational performance. Based on effect sizes from fifty-three studies encompassing 20,212 organizations, we estimate that the overall effect size of the guanxi–performance relationship is positive and significant, thus endorsing the argument that guanxi does enhance organizational performance. Specifically, our meta-analysis results demonstrate that both business and government ties lead to both economic and operational performance. However, business ties have a bigger impact on operational performance, whereas government ties exert larger effects on economic performance. Further meta-analytic regression results suggest that ownership (state-owned vs. non-state-owned) and location (Mainland vs. overseas China) explain some of the variations of the guanxi–performance link. Both business and government ties are more important to organizations in Mainland China than to those in overseas China. Government ties are more important to state-owned than to non-state-owned organizations. Lastly, while business ties remain a valuable strategic tool in China, the importance of government ties is time-variant and has been declining with the development of the institutional environment in China.

KEYWORDS China, guanxi, meta-analysis, performance

INTRODUCTION

Social networking as a strategy has grown as an indispensable theme in organization and management research in emerging economies (Boisot & Child, 1996; Wright, Filatotchev, Hoskisson, & Peng, 2005). A social networking tool that has
permeated every corner of Chinese society is *guanxi*, a concept of drawing on a web of connections in personal and business relations (Park & Luo, 2001). Due to the social embeddedness of business relations in China, *guanxi* has been advocated as a pervasive relationship lubricant that helps to increase the efficiency and effectiveness of daily business operations. It is also an essential informal governance mechanism that helps create social and economic value for organizations in China (Fock & Woo, 1998; Gu, Hung, & Tse, 2008; Xin & Pearce, 1996). Accordingly, the advice typically given to Western managers has been to learn *guanxi* cultivation and practices when doing business in China. The past two decades have witnessed an escalating interest among researchers in exploring the impacts of *guanxi* on business relations and performance – from earlier interpretative, qualitative theorizing explorations (e.g., Yang, 1994; Yeung & Tung, 1996) to more recent systematic, quantitative empirical testing (e.g., Gu et al., 2008; Peng & Luo, 2000; Xin & Pearce, 1996).

Originated as a cultural phenomenon referring to personal relationships at the individual level (Chai & Rhee, 2010; Yang, 1994), the concept of *guanxi* was extended to the organizational level. Arguing that *guanxi* can be transferred from the individual level to the corporate level, organizational researchers perceive *guanxi* as a source of social capital and a strategic tool for organizations that helps facilitate business operations, open dialogues, acquire intelligence, and build trust (Hoskisson, Eden, Lau, & Wright, 2000; Park & Luo, 2001; Peng & Heath, 1996; Xin & Pearce, 1996). Earlier works by Peng and Luo (2000), Park and Luo (2001), and Luo (2001) propose *guanxi* at the organizational level as managerial ties and define organizational *guanxi* as managers’ social networks and ties with business partners and government officials that can be employed for organizational purposes. This definition of *guanxi* includes two domains: (i) ties with managers at other business firms such as suppliers, buyers, competitors, and other business intermediaries (Dubini & Aldrich, 1991; Peng & Luo, 2000); and (ii) ties with government officials at various levels of governmental, bureaucratic, and regulatory agencies (Luo & Chen, 1997; Peng & Luo, 2000).

Despite the growing attention the emerging *guanxi* literature has drawn, two major issues have limited our understanding of *guanxi*’s efficacy at the organizational level. The first issue centres on the relevance of *guanxi* to organizational performance in China. Although many *guanxi* scholars perceive a facilitative role of *guanxi*, extant empirical findings have shown inconsistent results concerning the impact of *guanxi* on organizational performance – ranging from a positive linear relationship (e.g., Peng & Luo, 2000) to an inverted U-shape (e.g., Luo & Chung, 2005) to even negative (e.g., Li, Zhou, & Shao, 2009; Liu, Li, & Xue, 2010). The mixed results, and particularly the negative ones, have led to cautions on *guanxi*’s potential damage to organizations – the so-called ‘dark side’ because of large investment in *guanxi* and obligations to pay back favours (e.g., Chen, Chen, & Xin, 2004; Yi & Ellis, 2000), failing to adapt to changes in the market environment due
to collective blindness (e.g., Gu et al., 2008), and devious use of guanxi for personal gain or corporate corruption due to unethical manager behaviour (e.g., Dunfee & Warren, 2001; Vanhonacker, 2004). Consequently, whether guanxi is an effective managerial tool in improving organizational performance seems to be in question.

The second issue focuses on whether there is a changing role of guanxi in China’s dynamic environment. Along with the growing interest in guanxi research, there has been a heated debate among scholars concerning the continuing or decreasing role of guanxi in China. One perspective, represented by Yang (1994), views guanxi as a deep-seated idiosyncratic Chinese culture and argues that guanxi’s importance will continue. Since business relations are embedded in personal ties, guanxi will maintain its effectiveness and guanxi practices will likely increase at an accelerated rate in Chinese society. In contrast, the other perspective, represented by Guthrie (1998), perceives guanxi as an institutionally defined system that depends on the institutional structure of Chinese society rather than on culture. Therefore, the peculiarity and pervasiveness of guanxi is due to the weak institutional structure in China, but as China’s rational–bureaucratic system matures, the importance of guanxi will decline (Zhang & Keh, 2010) and eventually disappear. These two perspectives predict guanxi on opposite trajectories, and an empirical test of two perspectives requires a longitudinal study on guanxi spanning a rather long period – a very difficult task for researchers. Consequently, the question of whether or not the role of guanxi changes over time remains a puzzle.

This study is intended to tackle the above two issues. Handling the first issue about the efficacy of guanxi in driving organizational performance, we contend that a clearer picture of the impacts of guanxi can be unveiled by distinguishing the separate effects of business and government ties on overall organizational performance, and further on two specific performance categories – economic and operational performance respectively. To explore the second issue regarding how the role of guanxi has changed during China’s institutional transition, this study proposes to use time as a proxy of the degree of institutional development in China and examine the temporal variation of the guanxi–performance effects. Addressing these two issues, this study has a three-fold goal: (i) to determine guanxi’s value at the organizational level by gauging the distinct impacts of guanxi domains (i.e., business and government ties) on organizational performance (i.e., economic and operational performance); (ii) to trail the change of the role of guanxi in China’s transitional economy by assessing the change of the guanxi-performance relationship over time; (iii) to examine other potential moderators (i.e., institutional and methodological) that explain inconsistencies in prior findings. To achieve this goal, we adopt meta-analysis, a technique that not only helps statistically aggregate prior empirical results to calculate effect sizes of the guanxi–performance link, but also allows us to discern moderators that explain the variations of the relationship.

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This article is organized as follows. First, we review the *guanxi* concept at the organizational level and the organizational performance construct. Then, drawing on social capital theory, we propose corresponding hypotheses related to the relationships between *guanxi* domains and organizational performance categories as well as their contingent factors. This is followed by a description of the method for literature search and data collection. After testing the hypotheses and presenting the results, we discuss the implications and map out directions for further studies of *guanxi* in terms of theory development and future empirical testing.

**CONCEPTUAL FRAMEWORK**

**The Guanxi Concept**

The concept of *guanxi* originated from a Chinese social philosophy – Confucianism – that has been influencing the belief systems of Chinese society for more than 5,000 years. Confucianism holds that human beings are fundamentally relationship-oriented and that building a strong and orderly hierarchy of relations can help achieve social and economic order in society (Luo, 1997; Yeung & Tung, 1996). Such a hierarchy of interpersonal relationships with an emphasis on implicit mutual obligations, reciprocity, and trust, has formed the foundation of *guanxi* and *guanxi* networks in China (Yang, 1994). Consequently, *guanxi*, due to its cultural embedded nature (Chai & Rhee, 2010; Guo & Miller, 2010), has become the lifeblood of social interactions and business conduct in Chinese society.

Despite its long history as a Chinese cultural phenomenon, *guanxi* does not have a precise definition in the literature. The two Chinese characters that make up the term *guanxi* mean ‘a gate’ and ‘to connect’, thus *guanxi* is usually loosely translated as ‘relations’ or ‘connections’ in English (Luo, 1997, 2000). More than one decade ago, Tsui and Farh (1997: 59) remarked that ‘the literature (both Chinese and English) shows no consensus in the translation or definition of the term *guanxi*’. To date, this statement remains true. Various conceptualizations of *guanxi* include ‘relationships’ (e.g., Dunfee & Warren, 2001), ‘networked relations’ (e.g., Boisot & Child, 1996), ‘social capital’ (e.g., Luk, Yau, Sin, Tse, Chow, & Lee, 2008), ‘social connections’ (e.g., Gu et al., 2008), ‘managerial ties’ (e.g., Park & Luo, 2001), ‘reciprocal obligations’ (e.g., Lee & Oh, 2007), etc. Among these conceptualizations, we deem that the ‘managerial ties’ proposed by Peng and Luo (2000) embody the essence of *guanxi* at the organizational level because this conceptualization illuminates top managers’ using their ties and networks with partners and government officials for organizational purposes. Accordingly, we adopt the conceptualization of organizational *guanxi* as managerial ties – consisting of business and government ties – in this meta-analysis to assess the efficacy of *guanxi* on driving organizational performance.

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After identifying the theoretical meaning of *guanxi* at the organizational level, we review studies containing organizational *guanxi*. Due to the various forms of the *guanxi* definition, the measures of *guanxi* have also been diverse. Many *guanxi* studies have followed or extended Peng and Luo’s (2000) and Park and Luo’s (2001) measure of managerial ties as a direct measure of *guanxi* at the organizational level while others have adopted more indirect measures as a proxy of *guanxi*. For example, Luo and Chen (1997) use sales force marketing and credit liberalization as indirect measures of *guanxi*, Li, Schulze, and Li (2009) adopt the number of partners of an organization as a proxy of the focal organization’s social capital, and Zhang and Fung (2006) employ entertainment cost to represent an organization’s investment in *guanxi*. We deem that both direct (e.g., managerial ties) and indirect (e.g., entertainment expenses) measures reflect *guanxi*’s strength and/or extent. Therefore, in this meta-analysis, we include *guanxi* studies that used either direct or indirect measures. The type of *guanxi* measures (direct vs. indirect) will be used as a methodological moderator as specified in the subsequent section.

**Organizational Performance**

The concept of organizational performance lies at the heart of the strategic management literature (Venkatraman & Ramanujam, 1986). In order to reveal the impact of *guanxi* on organizational performance, it is important to recognize the multi-faceted nature of the organizational performance construct (Carroll, 1979; Chandler & Hanks, 1993; Hult et al., 2008). Indeed, prior *guanxi* studies have used different types of performance measures in testing the economic and operational benefits of *guanxi* that an organization can capture, including financial-based (e.g., Chung, 2006; Fung, Xu, & Zhang, 2007), market-based (e.g., Gu et al., 2008), social-based (e.g., Liu et al., 2010), and competitive-based (e.g., Gao, Xu, & Yang, 2008; Zhang & Li, 2010) measures. Adapting from Venkatraman and Ramanujam’s (1986) organizational performance classificatory scheme, in this meta-analysis we classify organizational performance measures into two categories – economic and operational performance. Economic performance centres on outcome-based financial (e.g., return on assets, return on investment, profit growth) and market (e.g., market share, sales growth, stock-market returns) indicators, reflecting the fulfillment of the economic goals of the firm (Dess & Robinson, 1984; Venkatraman & Ramanujam, 1986). Operational performance refers to non-economic aspects, inclusive of observable outcomes (e.g., customer satisfaction, customer loyalty, support for local communities) related to a business organization’s social and societal relationships (Wood, 1991) and competitive success factors (e.g., new product introduction and innovation, product/service quality, productivity, marketing effectiveness) that lead to operational efficiency (Venkatraman & Ramanujam, 1986).

We argue that a business organization’s business ties and government ties may have different roles in China, and consequently, the benefits arising from each may
be different. Thus, the effect sizes of the guanxi–performance link may vary across different ties and performance categories. In this meta-analytic study, we therefore include two guanxi domains (business and government ties) and two performance categories (economic and operational performance) derived from the literature in order to scrutinize the distinct effects of each kind of guanxi. Table 1 provides a summary of guanxi and organizational performance measures included in this study.

**The Guanxi–Performance Link**

Researchers have been paying increasing attention to the utilization of guanxi by organizations in China and the effectiveness of guanxi in boosting organizational performance. Guanxi at the organizational level is viewed as a strategic tool or an informal governance form because social capital embedded within and derived from ties and networks possessed by an organization can be employed for organizational benefits (Luk et al., 2008; Park & Luo, 2001). As such, guanxi in the literature has been considered a competitive capability through the embedded ties that organizations form within networks and alliances (McEvily & Marcus, 2005), a source of organizational resource that is difficult to duplicate due to social complexity (Atuahene-Gima, Li, & De Luca, 2006), a relationship that is based on strong or weak ties (Zou, Chen, & Ghauri, 2010), or structural holes that provide access to needed resources (Luo & Chung, 2005). Meanwhile, several theories (e.g., social capital theory, resource-based view, social network theory, relational governance, structure holes theory, etc.) have been used to explain the guanxi–performance link; and each of these theories provides an important rationalization for understanding the mechanism underlying the guanxi–performance linkage. All of these rationalizations are based on, to a varying degree, the concept of social capital and suggest that social capital embodied in guanxi ties and networks helps improve organizational performance. Thus, in this study, we adopt social capital theory as an overall framework explaining the guanxi–performance link and its contingent relationships.

According to social capital theory (Adler & Kwon, 2000; Burt, 1992; Portes, 1998), social ties provide access to valuable resources which can be used to achieve a variety of positive outcomes. In fact, social capital itself is considered one type of resource (i.e., the sum of actual and potential resources) that is embedded within, available through, and derived from the network of ties (Nahapiet & Ghoshal, 1998). Social capital engendered by the fabric of social ties can be mobilized to facilitate actions (Adler & Kwon, 2000). As such, social capital theory recognizes the importance of social ties among individuals and organizations and posits that tangible advantageous outcomes (such as privileged access to knowledge and information, preferential opportunities, enhanced reputation, etc.) can be obtained through the network of ties (Inkpen & Tsang, 2005). Adler and Kwon (2000)
### Table 1. Measures of guanxi and performance

<table>
<thead>
<tr>
<th>Construct</th>
<th>Proxy/definition</th>
<th>Representative measure</th>
<th>Representative study</th>
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<tr>
<td>Guanxi</td>
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<td>Direct Measures:</td>
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<td>Managerial ties:</td>
<td>[Likert scale] Top managers at our organization actively build personal ties, networks, and connections with: 1. Managers at buyer organizations; supplier boundary-spanning organizations; competitor organizations. 2. Officials in various levels of the government; in industrial bureaus; in regulatory and supporting organizations such as tax bureaus, state banks, commercial administration bureaus, and the like.</td>
<td>Peng &amp; Luo, 2000; Li et al., 2009</td>
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<tr>
<td>Social ties/connections:</td>
<td>[Likert scale] 1. Our senior management has personal relationships with important people. 2. Our senior management is able to obtain valuable and important information. 3. Our senior management is able to obtain government approvals. 4. Our senior management is able to obtain resources like land and electricity from local authorities. 5. Our senior management is able to obtain financing or list stocks.</td>
<td>Luo, 2001; Gu et al., 2008</td>
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<td>Indirect Proxies:</td>
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<tr>
<td>Social ties/capital: the sum of the actual and potential resources embedded within, available through, and derived from the network of relationships possessed.</td>
<td>1. A dummy variable indicating the presence of certain membership. 2. A continuous variable measured as the investment in guanxi such as entertainment expenses, the number of partners to the focal organization, etc.</td>
<td>Fung et al., 2007; Zhang &amp; Fung, 2006; Li et al., 2009</td>
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<td>Performance</td>
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<td>Economic performance</td>
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<tr>
<td>Financial-based</td>
<td>Subjective/objective assessment on return on investment, return on equity, profit growth, return on assets, return of equity, cash flow, sales growth</td>
<td>Li et al., 2009</td>
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<tr>
<td>Market-based</td>
<td>Subjective/objective assessment on market share, market share growth, export growth, market-to-book or stock-market returns, Tobin’s Q</td>
<td>Filatotchev, Liu, Buck, &amp; Wright, 2009; Park &amp; Luo, 2001</td>
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<tr>
<td>Operational performance</td>
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<tr>
<td>Competitive-based</td>
<td>[Likert scale] 1. Competitiveness: (1) We often defeat our competitors in the marketplace. (2) Our company responds more promptly to market demands.</td>
<td>Wu, 2008</td>
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<tr>
<td>Social/societal-based</td>
<td>[Likert scale] 1. Levels of customer satisfaction achieved. 2. Levels of customer loyalty achieved. 3. Providing employment and income locally.</td>
<td>Luk et al., 2008</td>
<td></td>
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</table>
summarize three benefits of social capital. First, social capital provides access to information through broader sources and with better quality, enhanced relevance, and greater timeliness. For example, Uzzi (1997) finds that social embeddedness is conducive to the exchange of fine-grained information among business organizations. Second, influence, control, and power resulting from possessing social capital allow organizations to get things done and achieve their goals. Due to their bridging locations, Burt (1992) argues that managers spanning structural holes are more powerful due to their control of information and resource flows; and therefore they can be more effective in getting things done. Third, strong social norms and belief provide solidarity that encourages compliance and reduces the need for formal controls. Ouchi (1980) suggests that clan-type organizations benefit from lower monitoring costs and higher solidarity. Supporting this view, Nelson (1989) demonstrates that groups with strong intergroup ties usually resolve conflicts more efficiently and smoothly.

Applying social capital theory to guanxi in China, we argue that social ties and networks formed by managers with other managers and government officials bring social capital to the organizations to which they belong. Managers’ social capital can be transferred to their organizations because managerial ties involve managers using their ties and networks to exchange favours and reciprocal obligations for organizational purposes (Peng & Luo, 2000). Through the maintained and accumulated social capital derived from their social ties, managers and organizations are able to reap the information (through information flows), control (through resources flows), and solidarity (through reciprocal cooperation) benefits that allow organizations to operate more efficiently and to compete more effectively, which is conducive to overall organizational performance. More specifically, as identified by Luo and Chen (1997) and Peng (1997), managers in China cultivate ties with two most important cohorts of stakeholders in the task environment – managers at other business firms (e.g., suppliers, customers, and competitors, etc.) and officials at government authorities and regulatory agencies. The former is referred to as ‘business ties’ and the latter as ‘government ties’. Apparently, these two types of guanxi ties are distinct because business ties are horizontal (i.e., between peers) whereas government ties are vertical (i.e., between authorities and subordinates) (Luk et al., 2008). Despite this difference, we expect that both business and government ties are conducive to organizational performance.

Business ties help overcome distrust and maintain harmonious relationships with suppliers and customers; thus business ties can improve economic performance through reduced transaction costs (Standifird & Marshall, 2000; Williamson, 1985). Further, as Peng and Luo (2000) describe in their study, business ties with suppliers may help obtain quality products and superior services; business ties with buyer firms may induce customer satisfaction and loyalty, increase sales volume, and ensure timely payment; and business ties with competitor firms may facilitate interfirm alliance and implicit collusion. Thus business ties can enhance
operational performance through heightened process efficiency and partner collaboration. Government ties, on the other hand, function as a substitute for formal institutional support (Xin & Pearce, 1996) because social capital engendered from ties with government officials can compensate for lack of market-supporting institutions such as transparent laws and regulations. Managerial ties with government officials are formed in order to access scarce resources, to obtain information about policies, and to reduce uncertainty (Podolny & Page, 1998). China’s recent economic transition has produced a high degree of institutional uncertainty and institutional voids (Krug & Hendrischke, 2008; Nee, 1992). In such an environment, to substitute for reliable government and an established rule of law, informal institutional support, such as interpersonal ties and networks cultivated by managers, plays a more important role in facilitating economic transactions, resource acquirement, and business operations (Peng & Heath, 1996), and in turn, improves economic and operational outcomes. Consequently, we expect an overall positive impact of guanxi on organizational performance. 

More specifically, we posit that:

H1a: The impact of business ties on organizational performance will be positive.

H1b: The impact of government ties on organizational performance will be positive.

Social capital that may exert a powerful positive influence on organizational performance can, at the same time, limit ‘its openness to information and to alternative ways of doing things, producing forms of collective blindness that sometimes may have disastrous consequence’ (Nahapiet & Ghoshal, 1998: 245). In other words, a specific social capital is not a universally beneficial resource in that one given form of social capital that is useful for facilitating certain actions may be less valuable for others (Coleman, 1990). In light of this perspective, we believe that business and government ties vary in their influences on different dimensions of organizational performance. To be precise, we argue that business ties exert a stronger impact on operational performance whereas government ties assert a stronger influence on economic performance. Business ties bolster an organization’s performance through improving its operational efficiency and effectiveness, and thereby operational effectiveness. For example, Kaufman, Jayachandran, and Rose (2006) find that buyer–salesperson personal ties positively influence new product introduction and customer acceptance. Larson (1991) argues that new ventures that possess congenial business ties with partners enjoy reduced production and inventory costs, speedy product development, expanded markets, or secure technology. Similarly, Zou et al. (2010) find that strong ties help new ventures develop competitive advantage through their growth with partners. These findings show that business ties with customers, suppliers, and competitors have a stronger influence in driving operational performance.
In contrast, government ties with officials may help organizations gain access to economic resources such as subsidized loans, investment tips, protected markets, etc. (Portes, 1998). Government officials in China have been an important source of critical information and resources due to their considerable power to approve projects and allocate resources (Peng & Heath, 1996). Hence, fundamentally, guanxi with government officials may help generate larger monopoly rents through government support, institutional exemptions, resource privileges, etc., which may in turn generate financial-based profits or increase market-based value for the organization. In line with the above argument, we posit that:

**H2a:** The impact of business ties will be stronger on operational performance than on economic performance.

**H2b:** The impact of government ties will be stronger on economic performance than on operational performance.

### The Guanxi–Performance Contingencies

Recent developments in social capital theory suggest that the effectiveness of social capital may be contingent on important contextual factors (Adler & Kwon, 2000; Burt, 1992; Xiao & Tsui, 2007). Indeed, the results from prior empirical studies produce mixed signals ranging from the positive (Peng & Luo, 2000) to the negative (e.g., Li et al., 2009; Liu et al., 2010). Following this view, we contend that the role of guanxi is contingent on institutional attributes unique to each organization. Our review of the literature reveals three institutional factors that may moderate the value of guanxi: ownership, location, and time. During the economic reform and transition, China has greatly changed its institutional structure, including political, economic, and organizational ownership structures (Hoskisson et al., 2000; Tsui, Schoonhoven, Meyer, Lau, & Milkovich, 2004). Therefore, there is a big variation across Chinese organizations in terms of institutional advantages and disadvantages. In proposing the moderated relationships in the sections that follow, we distinguish the roles of business ties and government ties in advancing overall organizational performance.

**Ownership structure:** State-owned vs. non-state-owned organizations. Investments in social capital are not costless; unbalanced investment in social capital can transform a potential advantage into a liability (Adler & Kwon, 2000; Podolny & Page, 1998). In guanxi literature, scholars have noted the significant and growing body of work that underscores the discrepant benefits and costs among different ownership organizations (e.g., Li et al., 2008; Luo, 1997; Peng & Luo, 2000). Ownership is a useful scheme for classifying organizations in emerging economies (Peng & Heath, 1996) as well as an important organizational characteristic.
in explaining organizational strategy (Zhang & Keh, 2010). In particular, the coexistence of state-owned enterprises and non-state-owned enterprises is an essential characteristic of China’s transitional economy. State-owned enterprises (SOEs), formally owned by the ‘whole people’ and formed during the socialist era, once carried tremendous weight in the Chinese national economy (Zhang & Keh, 2010). In recent years, the SOEs’ share of GDP has declined in China, but SOEs remain an important force in the market, especially in strategic state sectors such as telecommunications, oil, and power generation. Non-state-owned enterprises, including privately owned enterprises (POEs) and foreign-invested enterprises (FIEs), which both emerged during the economic reform, have been increasingly gaining importance to the Chinese economy.

SOEs in China used to be entitled to a large degree of available resources due to their ownership rights (Gu et al., 2008; Li, Yao, Sue-Chan, & Xi, 2011). However, during the economic reform, SOEs have lost some privileges such as bank loans and special protection from the central and local government and have found that they have to compete with POEs and FIEs on relatively equal bases. Consequently, SOEs, similar to non-SOEs, need to rely on ties with other business partners, particularly other SOEs, in order to facilitate interorganizational coordination (Zhang & Keh, 2010) and to increase competitiveness. Thus, we expect that business ties affect organizational performance similarly for both SOEs and non-SOEs.

On the contrary, government ties may affect SOEs and non-SOEs differently. In earlier years (1980s–90s), when marketization was in an embryonic stage in China, there was cumbersome and sturdy government control over critical resources and market entry. This put non-state-owned enterprises at a disadvantage, comparing with state-owned rivals which were then largely protected by the central or local governments (Fock & Woo, 1998; Xin & Pearce, 1996). This situation has changed as China’s marketization (including factor market, product market, capital market, and intermediary services) dramatically increases and government control over resources and market entry markedly decreases. Although SOEs have lost some privileges since the reform, they continue to have better access and greater resource dependence on government officials (Peng & Luo, 2000) compared to their non-SOE counterparts. Li et al. (2011) analyze 250 Chinese firms and find that managers employed by SOEs possess more governmental ties with government officials than those employed by non-SOEs. In an imperfect environment still lacking market-supporting institutions, SOEs’ government ties can help them obtain critical market information, understand regulations and policies, enforce contracts, and settle payments (Guo & Miller, 2010; Luo, 2003). Thus, SOEs’ government ties enable them to understand the rules of the game better, gaining a more advantageous position than non-SOEs (Gu et al., 2008). Further, government ties may provide SOEs leverage of circumventing rules to avoid substantial bureaucratic costs and also better access to resources, thus contributing to SOEs’ orga-
izational performance. Moreover, because government officials in power control many market opportunities (Luo, 2003), SOEs’ government ties can help them seize market opportunities that lead to organizational performance in a timely manner. As such, we posit the following hypotheses:

\[ H3a: \text{The impact of business ties on organizational performance for state-owned organizations and non-state-owned organizations will exhibit a similar level.} \]

\[ H3b: \text{The impact of government ties on organizational performance will be stronger for state-owned organizations than non-state-owned organizations.} \]

\textit{Location: Mainland vs. overseas China.} The acquisition of social capital requires deliberate investment of both economic and cultural resources, and utilization of social capital often involves less transparency and more uncertainty (Portes, 1998). This requires an appropriable social context to safeguard ambiguous exchange and to reap the benefits of the social network (Coleman, 1990). In line with this view, Adler and Kwon (2000) suggest that social capital is a resource available to individual or organizational actors as a function of their location. Thus, \textit{guanxi} provides an alternative mechanism that enables organizations to bypass institutional hurdles (Boisot & Child, 1996). Compared to Mainland China, overseas China such as Hong Kong (HK) and Taiwan enjoys a higher level of economic development with fewer institutional constraints. Thus, in these more marketized regions where formal institutions for exchanges are present and efficiently maintained, the use of \textit{guanxi} is less salient (Gu et al., 2008). Further, overseas China has different cultural environments, business atmosphere, government policies, and generally maintains more Western-style business practices (Park & Luo, 2001). Rather than relying on informal governance such as \textit{guanxi}, organizations in overseas China tend to use formal contracts (Punnett & Yu, 1990). After thirty years of market reform, legal framework in Mainland China still lags behind, and formal contracts or agreements are not taken seriously (Luk et al., 2008; Tsui et al., 2004). Organizations in Mainland China still rely on their business and government ties to clinch deals and protect their interests (Krug & Hendrischke, 2008). Thus, we propose:

\[ H4a: \text{The impact of business ties on organizational performance will be stronger in Mainland China than in overseas China.} \]

\[ H4b: \text{The impact of government ties on organizational performance will be stronger in Mainland China than in overseas China.} \]

\textit{Time: Changes in the institutional environment in China.} The value of social capital is not static, but evolving. Social capital is fundamentally concerned with resources
located within certain structures; as such, the impact of social capital is significantly affected by relevant environmental factors shaping the evolution of social relationships (Nahapiet & Ghoshal, 1998). We emphasize this trait of social capital because we believe it represents an important aspect not yet discussed in the mainstream literature on social capital but the significance of which is receiving substantial attention in the strategy and management domain. This trait of social capital is particularly important to the investigation of guanxi social capital in the context of a rapidly changing emerging market like China (Guthrie, 1998).

Two perspectives that have explained the role of guanxi in the Chinese economy have claimed the opposite trajectories regarding the relative importance of guanxi along with the gradual improvement in the institutional environment of China over the last two decades. The cultural perspective proposes a stable role of guanxi, while the institutional structure perspective predicts a declining role of guanxi over time. We propose to solve this debate by distinguishing the importance of business ties from government ties. We suggest that the cultural perspective explains the importance of business ties whereas the institutional structure perspective explains the relevance of government ties. Accordingly, the trajectories of business ties and government ties should be separately analyzed in China’s transitional economy.

As Peng and Heath (1996) argue, the internal growth of organizations in emerging economies is limited by institutional constraints; as a result, a network-based growth strategy is more viable in emerging economies. As emerging economies move toward market economies, rule-based, impersonal exchanges dominate the society, calling for a market-centred strategy (Peng, 1997). Relationships and networks are necessary but insufficient for superior performance (Peng & Luo, 2000). Instead, ‘market-based capabilities’ may become more important, implying that firms need both relational and competitive assets in order to survive and prosper.

Indeed, although guanxi has long been an integral cultural element in social and economic life in Chinese society, the importance of guanxi became more entrenched as China started transitioning to the open economy in the 1980s when China’s property rights were ambiguous and its institutional structure was weak and incomplete. To overcome institutional disadvantages, structural weakness, and other environmental threats, organizations rely heavily on guanxi. According to Peng and Luo (2000), data collected in the 1990s showed that government ties exerted a greater impact on organizational performance than business ties. This may imply that organizations had a greater resource dependence on government ties at that time because of resources and power possessed by government officials. In contrast, business ties between managers on a horizontal level are inclined to facilitate transactions, daily operations, and interorganizational relationships. Under a weak institutional environment, organizations utilize government ties to circumvent institutional and structural disadvantages; therefore, government ties are more prominent in facilitating performance. As market imperfection,
in institutional voids, and economic transformation all improve, the importance of government ties may decline because there is less need to depend on government officials for resources and protection (Krug & Hendrischke, 2008). However, the change in the institutional environment may not necessarily reduce the needs for business ties. In fact, the importance of business ties remains due to their focus on relationships and operations. Hence, we propose:

\[ H5a: \text{The impact of business ties on organizational performance will not change significantly over time.} \]

\[ H5b: \text{The impact of government ties on organizational performance will decline over time.} \]

Exploratory Methodological Moderators

One benefit of meta-analysis lies in its ability to detect the characteristics of original studies (e.g., measure, method, etc.) as potential moderators of the relationships under investigation (Hunter & Schmidt, 1990). Particularly, we are interested in examining guanxi and performance measures as potential sources of the guanxi–performance variations across studies. As mentioned above, scholars have adopted different guanxi measures either directly gauging its degree and extent (e.g., managerial ties) or indirectly reflecting its intensity by the amount of the investment (e.g., entertainment cost) or its extent by the total connections (e.g., number of partners). Although we have no prior reasons to hypothesize which type of guanxi measure (direct vs. indirect) is associated with a stronger guanxi–performance relationship, we speculate that the direct measure may reveal the guanxi–performance relationship more properly because, compared to the indirect one, the direct measure may be a more accurate measure of guanxi at the organizational level than the indirect proxy.

Similarly, there are considerable debates among scholars on using subjective and objective data to measure organizational performance (Dess & Robinson, 1984; Venkatraman & Ramanujam, 1986). Some researchers are suspicious of the validity of subjective performance measures, and are concerned about bias introduced by subjectivity (Hult et al., 2008). For example, Jaworski and Kohli (1996) point out the reliance on subjective measures as a limitation in marketing research. However, researchers have also noted the difficulties of collecting objective performance data in transitional and emerging market economies (Hult et al., 2008), and in some cases, problems associated with unreliable objective performance metrics due to non-standard reporting, unethical reporting execution, etc. (Hoskisson et al., 2000). Since the correlation between subjective and objective performance measures is often positive but far from perfect (Dawes, 1999; Dess & Robinson, 1984), it is possible that subjective vs. objective performance measures could be a source of guanxi–performance variation. Therefore, we explore two
methodological characteristics as potential moderators of the focal guanxi–performance link: (i) direct vs. indirect guanxi measure and (ii) subjective vs. objective performance measure. This exploratory approach has been adopted by previous meta-analytic reviews (e.g., Geyskens, Steenkamp, & Kumar, 2006; Tihanyi, Griffith, & Russell, 2005; Zhao, Luo, & Suh, 2004). Figure 1 summarizes the overall conceptual model tested in this meta-analytic review.

**METHOD**

**Literature Search and Sample Characteristics**

Multiple search techniques have been employed in this meta-analysis to identify qualified empirical studies. First, we conducted an electronic search in five computerized databases (i.e., ABI/Inform, EBSCOhost, PsycInfo, Elsevier Science Direct, and JSTOR) that include most business journals, using key words: ‘guanxi’, ‘managerial ties’, ‘social capital’, ‘social ties’, and ‘social network’. Second, we manually searched the following major management and international business journals: *Academy of Management Journal (AMJ)*, *Strategic Management Journal (SMJ)*, *Administrative Science Quarterly (ASQ)*, *Organizational Science (OS)*, *Journal of International Business Studies (JIBS)*, and other journals considered the most highly cited journals in the field of Chinese management such as *Asia Pacific Journal of Management (APJM)* and *Management and Organization Review (MOR)*. Third, we consulted the reference sections of all the articles from the second phase and citations of several key guanxi articles (such as Park & Luo, 2001; Peng & Luo, 2000; Xin & Pearce, 1996) to identify any studies that we might have overlooked. Finally, we gathered unpublished works by
searching Dissertation Abstracts and conference proceedings in marketing, management, and international business areas for the previous five years.

Since we attempt to unveil the relationship between *guanxi* and performance at the organizational level, empirical studies in our collection have to meet a set of criteria: (i) they must contain at least one organization-level performance indicator; (ii) they must entail *guanxi* at the organizational level; (iii) the empirical setting must be in the greater China context (Mainland China, Taiwan, and HK); and (iv) they must report sample sizes as well as computable effect sizes (e.g., correlation, t-statistics, or $P$-value with sample sizes). This multipronged review process yielded fifty-three studies published from 1997 to August 2010 in seventeen journals. Among the total, ten appeared in *APJM*, ten in *JIBS*, four in *SMJ*, three in *JWB*, two in *AMJ*, one in *ASQ*, one in *JM* and the rest from other journals. For the full list of these studies, please see Table 2 and references marked with an asterisk.

### Coding and Measures

We adopted r-family statistics for the effect sizes since they are scale free (Hunter & Schmidt, 1990). Specifically, we recorded the zero-order correlation ($r$) between *guanxi* and performance indicators, eliminating the influences of various control variables included in each study. Besides recording the effect sizes and study characteristics, the coding process involved two sorting tasks: (i) sorting *guanxi* into business or government, and combined ties if not distinguishable; (ii) sorting organizational performance into economic or operational performance. We prepared a coding protocol specifying the information to be extracted from each study to reduce coding error and two doctoral students who are familiar with *guanxi* literature coded each study independently. The inter-rater coefficient was over 90 percent, suggesting that the reliability of the coding process was acceptable. All discrepancies were resolved through discussion and consensus reached before the analyses began.

The final data contains 220 correlations from fifty-three studies with a total sample size of 20,212 organizations. Multiple correlations from a study were included when the study: (i) contained multiple independent samples (e.g., Peng & Luo [2000] provide separate results based on SOE and non-SOE samples; Luk et al. [2008] report different effect sizes for the Mainland sample and the HK sample); (ii) had both business and government ties and reported their effect sizes separately (e.g., Li et al., 2009); (iii) had both economic and operational performance measures and reported effect sizes on each (e.g., Zhou, Wu, & Luo, 2007). When studies reported more than one correlation for the same relationship (e.g., Li & Zhang, [2008] present three subsets of *guanxi*-performance effect sizes – ties with suppliers, customers, and competitors), we combined these correlations and calculated the corresponding reliability by using the Mosier formula (Hunter & Schmidt, 1990: 457–460). Some studies contained both business and
Table 2. Studies (53) included in the meta-analysis

<table>
<thead>
<tr>
<th>Journal of Management</th>
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<td>Administrative Science Quarterly</td>
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<td>Research Policy</td>
<td>Journal of Small Business &amp; Enterprise Development</td>
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<td>Luo, Hsu, &amp; Liu, (2008)</td>
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<table>
<thead>
<tr>
<th>Working paper/Conference presentation/Dissertation</th>
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government ties and both economic and operational performance indicators, and we included multiple effect sizes from these studies. As a result, the total number of effect sizes exceeded the number of studies included. For example, Luk et al. (2008) alone provided 12 unique effect sizes, given that they investigated effects of both business ties and government ties on both economic and operational performance indicators in two independent samples, Mainland China and HK, and for both SOEs and non-SOE firms. However, each effect size included in this study was independent and unique.

To detect and correct for outliers, we computed Huffcutt and Arthur’s (1995) sample-adjusted meta-analytic deviancy (SAMD) statistic and the result did not show any significant outliers. Of the effect sizes in the data (see Table 3), the

Table 3. Meta-analytic results of guanxi-performance links†

<table>
<thead>
<tr>
<th>Relationships</th>
<th>K</th>
<th>r</th>
<th>r</th>
<th>SE</th>
<th>95% CI</th>
<th>%Variance, Artifacts</th>
<th>QH</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Lower Upper</td>
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</tr>
<tr>
<td>H1</td>
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<tr>
<td>All Guanxi → All Performance Outcomes</td>
<td>220</td>
<td>0.15</td>
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<td>0.01</td>
<td>0.14</td>
<td>0.18</td>
<td>10.43</td>
</tr>
<tr>
<td>1. All Guanxi → Economic Performance</td>
<td>109</td>
<td>0.12</td>
<td>0.13</td>
<td>0.02</td>
<td>0.09</td>
<td>0.17</td>
<td>39.95</td>
</tr>
<tr>
<td>2. All Guanxi → Operational Performance</td>
<td>111</td>
<td>0.21</td>
<td>0.21</td>
<td>0.02</td>
<td>0.17</td>
<td>0.25</td>
<td>38.11</td>
</tr>
<tr>
<td>Business Ties → All Performance Outcomes</td>
<td>123</td>
<td>0.21</td>
<td>0.22</td>
<td>0.02</td>
<td>0.18</td>
<td>0.26</td>
<td>44.26</td>
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<td></td>
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<td></td>
<td></td>
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<tr>
<td>• Economic Performance</td>
<td>63</td>
<td>0.15</td>
<td>0.18</td>
<td>0.03</td>
<td>0.12</td>
<td>0.24</td>
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<tr>
<td>• Operational Performance</td>
<td>60</td>
<td>0.24</td>
<td>0.26</td>
<td>0.01</td>
<td>0.24</td>
<td>0.28</td>
<td>36.46</td>
</tr>
<tr>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• State-owned firm</td>
<td>61</td>
<td>0.21</td>
<td>0.22</td>
<td>0.02</td>
<td>0.18</td>
<td>0.26</td>
<td>82.47</td>
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<tr>
<td>• Non-state-owned firm</td>
<td>62</td>
<td>0.21</td>
<td>0.22</td>
<td>0.01</td>
<td>0.20</td>
<td>0.24</td>
<td>71.25</td>
</tr>
<tr>
<td>3. Location</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Mainland China</td>
<td>81</td>
<td>0.23</td>
<td>0.24</td>
<td>0.01</td>
<td>0.22</td>
<td>0.26</td>
<td>81.73</td>
</tr>
<tr>
<td>• Overseas China</td>
<td>42</td>
<td>0.19</td>
<td>0.20</td>
<td>0.01</td>
<td>0.18</td>
<td>0.22</td>
<td>54.60</td>
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<tr>
<td>Government Ties → All Performance Outcomes</td>
<td>47</td>
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<td>0.09</td>
<td>0.17</td>
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<tr>
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<tr>
<td>• Economic Performance</td>
<td>23</td>
<td>0.19</td>
<td>0.19</td>
<td>0.02</td>
<td>0.13</td>
<td>0.23</td>
<td>62.09</td>
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<tr>
<td>• Operational Performance</td>
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<td>0.09</td>
<td>0.02</td>
<td>0.05</td>
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<tr>
<td>2. Ownership</td>
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</tr>
<tr>
<td>• State-owned firm</td>
<td>36</td>
<td>0.15</td>
<td>0.16</td>
<td>0.01</td>
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<td>69.00</td>
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<td>• Non-state-owned firm</td>
<td>11</td>
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<td>3. Location</td>
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<tr>
<td>• Mainland China</td>
<td>35</td>
<td>0.14</td>
<td>0.14</td>
<td>0.01</td>
<td>0.12</td>
<td>0.16</td>
<td>75.17</td>
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<tr>
<td>• Overseas China</td>
<td>12</td>
<td>0.08</td>
<td>0.09</td>
<td>0.01</td>
<td>0.07</td>
<td>0.11</td>
<td>89.22</td>
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<tr>
<td>Combined Ties → All Performance Outcomes</td>
<td>50</td>
<td>0.12</td>
<td>0.13</td>
<td>0.01</td>
<td>0.11</td>
<td>0.15</td>
<td>25.67</td>
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<tr>
<td>1. Combined ties → Economic Performance</td>
<td>23</td>
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<td>0.11</td>
<td>0.01</td>
<td>0.09</td>
<td>0.13</td>
<td>72.22</td>
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<tr>
<td>2. Combined ties → Operational Performance</td>
<td>27</td>
<td>0.18</td>
<td>0.21</td>
<td>0.01</td>
<td>0.19</td>
<td>0.23</td>
<td>56.11</td>
</tr>
</tbody>
</table>

Notes:
* p < 0.05.
† K = effect sizes; r = sample weighted correlation; r = sample weighted and reliability corrected correlation; SE = standard error of sample weighted and reliability corrected correlation; Failsafe K = # of studies with null results needed to reduce the correlation to non-significance (0.05); % variance, artifacts = percentage of variance accounted for by artifacts; QH = Chi-square statistics for homogeneity; Combined ties refers to ties that we cannot categorize into business tie or government tie according to the measures.
number of effect sizes corresponding to the business ties–performance links was 123 (63 economic performance and 60 operational performances), to the government ties–performance links 47 (23 economic performance and 24 operational performance) and to the combined ties–performance links 50 (23 economic performance and 27 operational performance). Two hypothesized moderators (ownership and location) and two exploratory moderators (direct vs. indirect guanxi measure and subjective vs. objective performance measure) were coded as dummy variables. Time is a continuous variable as indicated by the year the study was conducted.

Meta-Analytic Techniques

Following previous meta-analysis studies in the management field (e.g., Bhaskar-Shrinivas, Harrison, Shaffer, & Luk, 2005; Crook, Ketchen, Combs, & Todd, 2008), we estimated the population effect sizes with sample weighted and reliability-corrected averaged correlations, taking account of both sampling error and measurement error. For unreliability adjustment, we corrected individual correlations through dividing the correlation coefficient by the product of the square root of the reliabilities of the two variables (Hunter & Schmidt, 1990). We conducted two tests of heterogeneity adopted by previous meta-analysis studies (Bhaskar-Shrinivas et al., 2005; Palmatier, Dant, Grewal, & Evans, 2006). We first computed the Q-statistic, a chi-square test where a significant value suggests the presence of possible moderator variables (Hedges & Olkin, 1985; Heugens & Lander, 2009). If the null hypothesis – that the true underlying correlation coefficient is identical for every study that is included into analysis – is rejected, the moderator analysis is then required. Because interpretation of the Q-statistic is based on a traditional significance test and Type II error rates are often high, we also relied on the 75% rule-of-thumb as another indicator of whether there were unsuspected moderators (Hunter & Schmidt, 1990). If the error variance accounts for less than 75% of the uncorrected variance, systematic variations among the studies exist, indicating the potential presence of moderator variables.

After computing the average effect size of the guanxi–performance linkage and identifying the heterogeneity through the Q-statistics, we conducted a set of subgroup meta-analyses within each guanxi domain and performance category. We also carried out the subgroup meta-analyses for each dummy coded moderator. We then performed a meta-regression to test all moderators (Cooper, Hedges, & Valentine, 2009; Hedges & Olkin, 1985). The meta-regression approach is favoured because it can simultaneously assess whether the institutional and methodological moderators are related to the heterogeneity of effect sizes (Balkundi & Harrison, 2006; Sterne, 2009). The rationale of meta-analytic regression is analogous to a modified weighted least squares regression and the optimal weights are inversely proportional to the variance in each study (Heugens & Lander, 2009). We adopted a mixed-effect model, in which variability in the effect size is attributed...
to both systematic between-study differences and the sampling error in addition to
the remaining unmeasured random component (Sterne, 2009). In the meta-analytic
regression models, the correlations between guanxi and organizational performance
were treated as the dependent variables. The proposed moderators were treated
as independent variables (ownership: SOE = 1; non-SOE = 0, location: Main-
land = 1; overseas = 0; time: year). In meta-regression, instead of the Q-statistics, we
reported the following three indicators for testing the overall heterogeneity: $I^2_{res}$, a
measure of the percentage of the residual variation that is attributable to between-
study heterogeneity; adjusted $R^2$, the proportion of between-study variance
explained by the covariates or the moderators; and $\hat{\tau}^2$, the remaining between-study
variance after taking account of all included covariates. Before conducting the
meta-regression, we made sure all assumptions (e.g., no multicollinearity, indepen-
dence of the errors, and normality of the error distribution) were satisfied.

RESULTS

Using the meta-analytic techniques described above, we synthesized the connec-
tion between guanxi and organizational performance and reported the number of
effect sizes ($k$), sample weighted correlation ($\bar{r}$), sample weighted and reliability
corrected correlation ($\bar{r}_c$), the standard error of sample weighted and reliability
corrected correlation, the corresponding 95 percent confidence interval (CI), per-
centage of variance accounted for artifacts, and the heterogeneity $Q$-value (see
Table 3). We first estimated the average effect sizes between overall guanxi and
organizational performance and obtained a positive significant result ($\bar{r} = 0.16$,
$k = 220$, 95 percent CI = 0.14–0.18). The significant heterogeneity $Q$-value
(2,118.14) and the small percent of variance due to artifacts (10.43) suggest the
existence of moderators.

The subgroup meta-analysis results in Table 3 suggest a strong positive relation-
ship between business ties and organizational performance ($\bar{r} = 0.22$, $k = 123$, 95
percent CI = 0.18–0.26). For government ties, we also found a significant positive
association with organizational performance ($\bar{r} = 0.13$, $k = 47$, 95 percent
CI = 0.09–0.17). Results further indicate a positive association between combined
ties and organizational performance ($\bar{r} = 0.13$, $k = 50$, 95 percent CI = 0.11–0.15).
Based on the above results, we conclude that there exist positive relationships
between an organization’s business ties and organizational performance and
between an organization’s government ties and organizational performance. There-
fore H1a and H1b are both supported.

The meta-analysis results also indicate that, on average, business ties show greater
impact on operational performance ($\bar{r} = 0.26$, $k = 60$, 95 percent CI = 0.24–0.28)
than on economic performance ($\bar{r} = 0.18$, $k = 63$, 95 percent CI = 0.12–0.24). In
contrast, the average artifact-corrected effect of government ties on economic
performance ($\bar{r} = 0.19$, $k = 23$, 95 percent CI = 0.15–0.23) is bigger than that on

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operational performance ($\bar{\tau} = 0.09$, $k = 24$, 95 percent CI = 0.05–0.13). These results confirm both H2a and H2b, indicating that the nature and type of benefits for the two types of guanxi are actually distinctly different. Regarding the moderating role of ownership, subgroup meta-analysis results show that business ties have similar positive effects on firm performance for state-owned ($\bar{\tau} = 0.22$, $k = 61$, 95 percent CI = 0.18–0.26) and non-state-owned firms ($\bar{\tau} = 0.22$, $k = 62$, 95 percent CI = 0.20–0.24), while government ties have a larger effect size for state-owned firms ($\bar{\tau} = 0.16$, $k = 36$, 95 percent CI = 0.14–0.18) than non-state-owned firms ($\bar{\tau} = 0.07$, $k = 11$, 95 percent CI = 0.05–0.09). These results support both H3a and H3b, suggesting that ownership is a significant contingent factor for the linkage between government ties and organizational performance.

In terms of moderating effect of location, the results indicate that both business ties and government ties have larger impacts on organizational performance for firms located in Mainland China (for business ties, $\bar{\tau} = 0.24$, $k = 81$, 95 percent CI = 0.22–0.26; for government ties, $\bar{\tau} = 0.14$, $k = 35$, 95 percent CI = 0.12–0.16) than for those located in overseas China (for business ties, $\bar{\tau} = 0.20$, $k = 42$, 95 percent CI = 0.18–0.22; for government ties, $\bar{\tau} = 0.09$, $k = 12$, 95 percent CI = 0.07–0.11). H4a and H4b are both supported, confirming our reasoning that geographic location is an important institutional moderator in the guanxi–performance link.

Although the results in Table 3 provide evidence to support H1a/b through H4a/b, note that these subgroup meta-analyses can only test dummy coded moderators (i.e., ownership and location, but not time). In order to test H5a and H5b (i.e., time as a moderator), we need to adopt the meta-regression approach. Further, the subgroup meta-analysis can only test one moderator at a time; the still significant $Q$-value in the subgroup analysis indicates that the tested moderator is probably not the only one as shown in Table 3. In the presence of multiple moderators, meta-regression can include both dichotomous and continuous variables (Balkundi & Harrison, 2006), which enables us to test all hypothesized moderators as well as the exploratory method moderators.

Table 4 reports the meta-regression results for business and government ties separately. The coefficient for ‘time’ is not significant for the business ties–performance relationships ($\beta = -0.02$, n.s.) while it is negative and significant for the government ties–performance relationships ($\beta = -0.48$, $p < 0.05$). These results support H5a and H5b, that the effect of business ties on firm performance remains the same over time but the effects of government ties decreases over time. For the business ties meta-regression model, 31.49 percent (Adjusted $R^2$) of the between-study variance is explained by the six covariates included and the remaining between-study variance ($\bar{\tau}^2$) appears small at 0.016. Similarly, for the government meta-regression model, 80.12 percent (Adjusted $R^2$) of the between-study variance is explained by the six moderators we proposed and the remaining between-study variance ($\bar{\tau}^2$) is very small at 0.003. These results signify that
Table 4. Meta-analytic regression results on moderators of *guanxi*-performance links

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Dependent variable: Ties and performance correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 1: Business ties</td>
</tr>
<tr>
<td></td>
<td>( \beta )</td>
</tr>
<tr>
<td><strong>Performance category</strong></td>
<td></td>
</tr>
<tr>
<td>H2  Operational vs. economic performance</td>
<td>0.30**</td>
</tr>
<tr>
<td><strong>Institutional Moderators</strong></td>
<td></td>
</tr>
<tr>
<td>H3  State-owned vs. non-state-owned firm</td>
<td>0.01</td>
</tr>
<tr>
<td>H4  Mainland vs. overseas China</td>
<td>0.20*</td>
</tr>
<tr>
<td>H5  Time</td>
<td>-0.02</td>
</tr>
<tr>
<td><strong>Exploratory Moderators</strong></td>
<td></td>
</tr>
<tr>
<td>Direct vs. indirect <em>guanxi</em> measure</td>
<td>0.23**</td>
</tr>
<tr>
<td>Subjective vs. objective performance measure</td>
<td>0.27**</td>
</tr>
<tr>
<td>K</td>
<td>123</td>
</tr>
<tr>
<td>( \tau^2 )</td>
<td>0.016</td>
</tr>
<tr>
<td>Adjusted R(^2)</td>
<td>31.49%</td>
</tr>
<tr>
<td>Model F (df)</td>
<td>10.30 (6, 116)</td>
</tr>
<tr>
<td>( I^2_{res} )</td>
<td>26.84%</td>
</tr>
</tbody>
</table>

**Notes:** *<0.05; **<0.01.

Standardized regression coefficient, standard error, and P-value are presented; K is the total number of effect sizes; \( \tau^2 \) = REML estimate of between-study variance; Adjusted \( R^2 \) = Proportion of between-study variance explained; \( I^2_{res} = \max[0,(Q_{res}-(n-k))/Q_{res}] \), % residual variation attributable to heterogeneity.

although each of the proposal moderators only explains part of the effect sizes variance, jointly they are able to account for a significant amount of the variance. In other words, we have identified major theoretically meaningful and statistically significant moderators that account for the differences in *guanxi*-performance relationships across studies.

The meta-regression results in Table 4 are consistent with the relevant results in Table 3. First, we found that business ties seem to have a greater effect on operational-oriented performance than on economic performance (\( \beta = 0.30, p < 0.01 \)), while government ties have a more significant effect on economic-oriented performance than on operational performance (\( \beta = -0.29, p < 0.05 \)), lending support to H2a and H2b. Regarding the ownership moderator, no differences were found significant for the business ties–performance linkage (\( \beta = 0.01, \text{n.s.} \)), whereas the government ties–performance relationship was significantly stronger for state-owned firms than for non-state-owned firms (\( \beta = 0.39, p < 0.05 \)). This result is consistent with H3a and H3b. Next, studies conducted in Mainland
China tended to yield a larger effect size than those conducted in overseas China, for both business ties ($\beta = 0.20, p < 0.05$) and government ties ($\beta = 0.22, p < 0.05$), corroborating the subgroup analysis results, and confirming H4a and H4b. Concerning the exploratory methodological moderators, direct guanxi measure exerts a larger effect size than indirect guanxi measure on organizational performance (for both business ties, $\beta = 0.23, p < 0.01$; for government ties, $\beta = 0.16, p < 0.05$), whereas subjective performance measure is associated with a larger effect size for business ties ($\beta = 0.27, p < 0.05$) but not for government ties ($\beta = 0.21, \text{n.s.}$).

DISCUSSION

Guanxi has been extensively studied in Chinese management yet the empirical findings on its importance have been noticeably mixed. We conducted a meta-analytic review to clarify this issue. Mainly drawing on social capital theory, this study reviews guanxi at the organizational level and answers the following questions: (i) Does guanxi relate to organizational performance? (ii) How does guanxi’s relationship to performance change over time? (iii) What institutional and methodological heterogeneities moderate the guanxi–performance linkage and why?

The results of this study make several contributions to research on guanxi at the organization level and to the field of Chinese management. First, by integrating the empirical results across fifty-three studies, we conclude on the overall efficacy of guanxi in driving business performance in China, thus answering the question regarding whether guanxi has been an effective organizational social networking strategy. Because developing and maintaining guanxi requires substantial investment in expenses, time, and effort, guanxi as a corporate strategy is not cost-free (Yi & Ellis, 2000). Thus, understanding whether guanxi is effective in facilitating organizational performance is not only important to researchers but also financially meaningful to practitioners who have been practising or are being advised to practice guanxi in China.

Second, this study decomposes guanxi into two, business and government ties following Peng and Luo (2000), to examine the distinct impact of each guanxi domain on organizational performance. Further, following Venkatraman and Ramanujam (1986) and Hult et al. (2008), we categorize organizational performance into economic (including financial and market indicators) and operational (including competitiveness and social indicators) performance. Such an approach enables us to compare the distinct effects of business and government ties on economic and operational performance respectively, and thereby depict a clearer picture of the role of guanxi in Chinese management.

Third, this study also includes institutional and methodological moderators that explain the variation in the guanxi–performance link. Incorporating multiple moderators allows for a comprehensive understanding of the contextual and methodological contingencies between guanxi and organizational performance.
particular, by including time as an institutional moderator and testing how the guanxi–performance link evolves over time, we are able to answer the question of whether the facilitating role of guanxi in Chinese business management has been declining as the institutional environment in China has been gradually improving, an evolutionary element that cannot be easily tested within the confines of a single study. In the next section, we discuss the findings from this meta-analytic study and implications for researchers and practitioners.

The Value of Guanxi

The meta-analytic results allow us to conclude that guanxi, as a peculiar form of social network strategy in China, has significant value in impelling organizational performance. Specifically, both business and government ties exert significant value in facilitating performance. Our results seem to suggest that, while the role of government ties in facilitating an organization’s success cannot be underestimated given the considerable power possessed by Chinese officials in controlling critical resources, market entry, and policy treatment, guanxi with business partners has shown a consistently prominent role in achieving overall superior firm performance. This finding also may suggest that business ties are more reciprocal, resilient, and transparent than government ties (Luk et al., 2008). As the market economy has become increasingly mature in China, relationships with non-governmental business stakeholders, such as buyers, suppliers, distributors, logistics agencies, and professional service providers, continue to be pivotal to organization growth and business expansion. Such business ties are especially beneficial to an organization’s resource sharing and reciprocal support, both imperative in a market featured with high velocity, dynamism, and vibrancy. The findings also support the distinct values of business ties vis-à-vis government ties for different aspects of performance and sends a strong message to managers who want to emphasize heightening different categories of performance.

Guanxi’s Evolutionary Path

The value of guanxi has perhaps never been completely static. This meta-analysis review offers some insights into the debate surrounding the importance of guanxi and whether it will decrease, remain stable, or increase. Our meta-analysis results support both the cultural perspective (Yang, 1994) and the institutional structural view (Guthrie, 1998) but for different guanxi domains. Our results further suggest the declining effect of guanxi on organizational performance over time, echoing Zhang and Keh’s (2010) proposition that guanxi is shifting from being primary to complimentary, especially for government ties. Thus, the result on business ties seems to support the cultural perspective while the result on government ties seems to support the institutional structure perspective. Business
ties with buyers, suppliers, competitors, and other business partners are built on more transparent, reciprocal, and voluntary personal relationships, which is a cultural value embedded and emphasized in Chinese society (Guo & Miller, 2010). Even with the progress of China’s economic reform and market transition, this value hardly subsides. Government ties, on the other hand, despite their instrumental value for many SOEs and entrepreneurial firms (Guo & Miller, 2010; Li et al., 2011), are often intertwined with corruption (Dunfee & Warren, 2001; Luo, 2004). Government ties are prone to economic self-interest and opportunity seeking, and involve hefty social, affective, and economic investments (i.e., costs) for organizations (Luo, 2000). Overall, the results suggest that as institutional and legal environments improve in China, organizations will rely less on government ties, but more on market mechanisms (Guthrie, 1998; Zhang & Keh, 2010). Therefore, a message sent to managers is to continue investing in business ties with customers, suppliers, and competitors, but be cautious of investing in and depending on government ties when the institution environment continues improving in China.

Other Institutional Moderators

One fundamental proposition of social capital theory is that network ties provide access to resources or information (Burt, 1992; Coleman, 1990). Certain network ties influence a firm’s access to certain critical information, contingent upon the available opportunities to a firm in the network. Underpinning this contingency perspective, this meta-analysis tested and refined conventional social capital theory. To begin with, our results confirm that ownership structure moderates the effect of guanxi on organizational performance. This result seems to suggest that both SOEs and non-SOEs utilize business ties to achieve operational efficiency and effectiveness, but SOEs still depend on government ties in boosting organizational performance.

Our results also confirm that the location of an organization moderates the effect of guanxi on organizational performance. Organizations in Mainland China rely more on business and government ties in order to gain access to resources and protection, timely and with less cost, from government than organizations in overseas China. It follows that the value of guanxi may be affected by, and contingent on, the institutional environment along with the levels of economic, legal, and social development. If this holds true, this result further corroborates the evolution pattern of guanxi. The value of guanxi in enhancing organizational performance may gradually decline as the institutional environment improves. Today’s HK may be tomorrow’s China; with the transition to a market economy, organizations’ reliance on informal ties, particularly government ties, may diminish and eventually disappear. However, scholars continue to observe and argue that guanxi, business and personal relationships embedded within the
Confucian tradition, may continue to influence the strategy and management of East Asian firms (Chai & Rhee, 2010), and the development of entrepreneurial firms (Guo & Miller, 2010).

Methodological Moderators

Our examination of methodological moderators also leads to several observations that may call for researchers’ attention. First, our meta-analysis displays that direct measures of guanxi incur a larger effect size. Direct measures may better disclose the true underlying relationships between the extent of guanxi and performance. This result confirms our speculation that direct measures may be a more accurate measure of guanxi than indirect proxy. Future studies are recommended to adopt direct measures of guanxi or include both types of measures for cross validation.

Second, our meta-analysis shows that subjective performance measures are associated with a larger effect size than objective performance measures for business ties. This may suggest that executives may attribute a firm’s success (when rated subjectively) to their guanxi with others. When both measures are taken from the same respondent, the results also may reflect the common method bias (Chang, Witteloostuijn, & Eden, 2010; Podsakoff, Mackenzie, Lee & Podsakoff, 2003). Future studies may need to pay more attention to this issue and adopt a combination of both subjective and objective measures to reduce common method bias and to ensure a more complete and accurate measure of organizational performance.

Limitations and Future Research Implications

This meta-analytic study has several limitations that should be borne in mind when interpreting the findings. First, any meta-analysis is constrained by the nature and scope of the original studies on which it is based (Hunter & Schmidt, 1990). For example, competitive intensity may be a moderator, but too few studies included this variable thereby preventing us from examining the moderating effect of competitive intensity. In addition, the cross-sectional nature of the original studies limited our ability to make confident causal inferences pertaining to the guanxi–performance relationship. Lack of longitudinal studies leads to causal ambiguity in the efficacy of managerial ties because, as Peng and Luo (2000) correctly speculate, it is possible that organizational performance may generate managerial ties since managers at successful firms are typically more popular and attract more personal ties than those at less successful firms. Thus, future research may clarify the guanxi–performance causality using longitudinal designs, as demonstrated by two studies in our sample (i.e., Batjargal, 2007; Chung, Mahmood, & Mitchell, 2005).

Second, despite the fact that guanxi has many definitions, our study focuses on managerial ties as the conceptualization of guanxi at the organizational level.

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Managerial ties in existing studies, however, focus only on *guanxi* at the top executive level without paying much attention to relationship-building by managers at middle and lower levels. Zhang and Zhang (2006) propose that *guanxi* studies should extend their scope to not only incorporate social ties of top executives but also interpersonal ties among employees at lower levels. Such a multilevel approach should be particularly relevant and fruitful in examining the role of *guanxi* in dyadic exchange contexts such as buyer–seller relationships and strategic alliances. For example, future research may examine *guanxi* in buyer–seller relationships between boundary spanners at multiple levels including the top executive level (i.e., between CEOs), the middle management level (i.e., between sales managers and purchasing managers), and the front line level (i.e., between buyers and salespersons).

Third, although based on the original studies in *guanxi* literature, this meta-analytic study finds only the positive outcomes of *guanxi*, it is important to note that the finding may be biased due to the lack of empirical studies on *guanxi*’s negative outcomes at the organizational level. Aside from the positive outcomes that social capital brings to organizations, organizational researchers have also cautioned about the risks of social capital. For example, Chen et al. (2004) examine the negative effects of *guanxi* practice on management at the micro level. As argued by Adler and Kwon (2000), social capital needs maintenance. Social ties require considerable investment (e.g., time, money, etc.) in cultivating and maintaining the relationships. In certain situations, social capital investment may not be cost efficient (Hansen, 1998). Further, social capital may backfire for the focal organization in several ways. On one hand, strong ties may overembed the manager or the organization in the relationship, resulting in parochialism and inertia (Adler & Kwon, 2000). In other words, ‘the ties that bind may also turn into ties that blind’ (Powell & Smith-Doerr, 1994: 393). On the other hand, there could be negative externalities associated with the social capital of a focal manager. Additionally, social ties may promote unethical behaviour and conspiracies (Brass, Butterfield, & Skaggs, 1998). Echoing these negative aspects of social capital, previous *guanxi* studies have noted *guanxi*’s dark sides such as costly investment (e.g., Peng & Luo, 2000), collective blindness (e.g., Gu et al., 2008), and unethical behaviours such as corruption (e.g., Dunfee & Warren, 2001). However, direct testing of *guanxi*’s negative aspect is still lacking. Future *guanxi* empirical research should examine the conditions that characterize the positive and negative effects of *guanxi* in order to develop a good understanding of how to balance the benefits and risk of *guanxi* in China.

Finally, this meta-analytic review examines the shifting role of *guanxi* with time under the assumption that *guanxi* as a social network strategy only reacts to the environment. In reality, co-evolution – the joint and interactive process of managerial intentionality, organizational efforts, and environmental change – may exist because *guanxi*, somewhat tantamount to corporate lobbying in developed countries, can be used to shape or change the institutional and competitive environments.

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Co-evolution assumes that organizational and environmental changes occur in a simultaneous and interactive manner (Lewin & Volberda, 1999). Thus, networking strategy is not merely a passive response to, but rather a proactive intention to change, the institutional and competitive environments facing the firm (Rodrigues & Child, 2003). For instance, large corporations have recently influenced the creation of new industry standards and new governmental policies in transition economies through networking with authorities and officials such that the new standards or policies are more supportive to business growth (Suhomlinova, 2006). Future studies may advance *guanxi* research by testing the co-evolution view toward an organization’s networking strategy along with the institutional environment change (Peng & Zhou, 2005). Methodologically, case study and survey research, both with longitudinal information, may shed light on such a co-evolutionary story.

CONCLUSION

Studies on *guanxi* at the organizational level have rapidly grown over the past decade, yet our understanding of the topic remains fragmented and far from complete. Our meta-analytic review, together with extensive discussions and future research suggestions, may furnish a reference for further theory development, research design, and empirical analysis in the field. We hope that this review clarifies and solidifies our knowledge of *guanxi* and its value on enhancing organizational performance, and believe that future research on *guanxi* will continue to blossom.

Synthesizing research findings of fifty-three empirical studies on the linkage between *guanxi* and organizational performance, our study endorses the prevalent argument that *guanxi* enhances organizational performance and confirms the value of *guanxi* networks on firm performance in greater China. Despite the overall efficacy of *guanxi* in boosting organizational performance and success, researchers and practitioners need to understand the different roles of each *guanxi* domain, i.e., business or government, as well as their dynamic evolutionary paths. Our results suggest that business ties continue to play a prominent role in facilitating organizational performance. The importance of government ties, however, has been steadily declining on account of the improvement in the institutional environment and a gradually established rule of law in China during the last decade. The continuing importance of business ties in business transactions reflects the deep rooted cultural characteristics of personal relationships in social and economic life in Chinese society. In other words, the significance of *guanxi*, and particularly business *guanxi*, may continue to hold strong implications for business dynamics in the Chinese society.

NOTES

References marked with an asterisk indicate studies included in the meta-analyses.

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